# Installation of Sand Fence on Timbalier Island (TE-40)

# PROJECT COMPLETION REPORT



Louisiana Department of Natural Resources Office of Coastal Restoration and Management Coastal Engineering Division Thibodaux Field Office

June 2006

#### PROJECT COMPLETION REPORT

PROJECT NAME:

Installation of Sand Fence on Timbalier Island (TE-40)

CWPPRA /

STATE PROJECT NO.

TE-40

REPORT DATE:

June 19, 2006

PREPARED BY:

**LDNR** 

1. Project Managers / Contracting Parties

LDNR Project Manager:

**Chris Williams** 

**EPA Project Manager:** 

**Patty Taylor** 

LDNR Construction Engineer:

**Daniel Dearmond** 

Inspection:

GSE Associates, Inc.

### 2. Location and description of project.

This project is located on Timbalier Island in Terrebonne Parish and involves installation of approximately 11,500 linear feet of an additional row of sand fence on the recently constructed dune of the TE-40 Timbalier Island restoration project. The TE-40 Timbalier Island restoration project was completed in December 2004 and is sponsored by the United States Environmental Protection Agency (EPA) and the Louisiana Department of Natural Resources (LDNR) under the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA). This sand fence installation project was constructed utilizing remaining funds within the CWPPRA TE-40 Timbalier Island project budget.

#### 3. Final As-built features constructed.

Below is a description of the constructed project features:

#### Base Bid:

11,500 linear feet of sand fence consisting of 4' wood slat sand fence stained with red iron oxide installed in 500' sections. Posts are 4" diameter by 8' long wooden fence posts (non-treated) installed 4' into the ground spaced at 10'. The fence is secured to the posts with galvanized steel wire. See As-builts for exact locations and layout of fence. It should be noted that 11,648.5' of fence was the actual length installed according to the as-built survey; although, the contractor was only compensated for the contract quantity of 11,500'.

#### **Project Cost Estimates** 4.

	Work Order Estimate	<b>Actual Cost</b>		
Construction	\$ 119,750	\$	119,750.00	
Engineering and Design*	\$ 13,800	\$	6,089.19	
Bidding*	\$ 1,650	\$	1,500.09	
Construction Administration*	\$ 7,650	\$	4,930.35	
Construction Inspection	\$ 21,464	\$	5,602.50 <sup>1</sup>	
As-built Survey & Drawings*	\$ 3,800	\$	1,368.74	
Post-Construction*	\$ 2,550	<u>\$</u>	711.57	
Project Totals:	\$ 170,664	\$	139,952.44	

<sup>\*</sup> Services performed in-house by LDNR. <sup>1</sup> Invoiced as of June 2006.

Note: Construction Inspection services were performed by GSE Associates, Inc.

#### 5. **Contract Quantities**

<u>Orig</u> Item 1 2	n Description  Mobilization  Sand Fence	<b>Unit</b> Lump Sum Linear Fence	<b>Quantity</b> 1 11,500		t Rate ,000.00 8.50	A1 \$ \$	22,000.00 97,750.00
	Original Contrac	ct Amount:				\$	119,750.00
<u>Fina</u> Item	<u>ıl</u> n Description	Unit	Quantity	Uni	t Rate	Aı	mount
1	Mobilization	Lump Sum	1	\$22,	,000.00	\$	22,000.00
2	Sand Fence	Linear Fence	11,500	\$	8.50	\$	97,750.00
	Final Construction	on Cost:				\$	119,750.00

## 6. Construction and Construction Oversight

Prime Contractor Erosion Control Services of Simmesport, Inc.

Original Construction Contract \$ 119,750.00

Change Orders \$ 0.00

Balancing Change Order (under run) \$ (0.00)

Final Construction Contract \$ 119,750.00

Construction Inspection Contractor GSE Associates, Inc.

Construction Oversight Amount \$ 5,602.50

### 7. Major Equipment Used:

Equipment Barge

Tug Boat (Miss Kylee)

Barge Boat

Volvo Hoe

ATV (4-wheeler)

ATV (6-wheeler) - 2

# 8. Discuss construction and sequences and activities.

- 3/10 Contractor hauled posts to island and unloaded.
- 3/14 Contractor hauled fence to island and unloaded and began layout/drilling holes for posts from west to east.
- 3/15 Continued laying out/drilling post holes and began installing posts.
- 3/16 Continued laying out/drilling post holes and installing posts; began tying fence to posts.
- 3/22 Engineer visited site and laid out alternate fence alignments with contractor.
- 3/29 Completed tying sand fence to posts.
- 4/03 Performed Final Inspection and accepted project as complete.

# 9. Construction Change Orders and Field Changes

One Field Change was required directing the contractor to delete the last 2,000 linear feet of sand fence at the east end of the alignment shown on the plans and instead place the 2,000 linear feet of fence in four alternate locations. This change was needed in order to maintain the contract quantity of fence. See comment below in paragraph 12. A.

### 10. Pipelines and other utility Crossings

No pipelines were within the construction limits of this project.

### 11. Safety and Accidents

No safety issues or accidents occurred during construction of this project.

## 12. Additional comments pertaining to construction of the project.

A. The design of this project began prior to Hurricanes Katrina and Rita. As a result of the hurricanes approximately 2,000 linear feet of the dune platform at the east end of the project was removed. The project was bid without changing the layout on the plans in order to avoid additional delays. In order to achieve the full contract quantity of sand fence a field order was executed directing the contractor to place the 2,000 linear feet of fence in four alternate locations. See the as-built drawings and Final Inspection field trip report for exact sand fence alignments and descriptions.

### 13. Significant Construction Dates

	Date
Pre-Bid Conference	1/10/2006
Bid Opening	1/24/2006
<b>Construction Contract Award</b>	2/14/2006
<b>Pre-construction Conference</b>	3/02/2006
Notice to Proceed	4/12/2006
Mobilization	3/10/2006
Construction Start	3/14/2006
Final Acceptance	4/03/2006

# 14. Photos of completed project.

See attached Final Inspection field trip report for photos of the completed project.